

PANOPEUS H. MILNE EDWARDS, 1834 (CRUSTACEA,
DECAPODA): PROPOSED DESIGNATION OF TYPE SPECIES
UNDER THE PLENARY POWERS. Z.N.(S.) 2236

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The present case is that of a genus based on a misidentified type species, and the Commission is asked to use its plenary powers to make the continued use of the current name of the genus possible.

2. In 1834 H. Milne Edwards (*Histoire naturelle des Crustacés*, vol. 1: 403) erected the new genus *Panopeus* to which he assigned two species: *Panopeus herbstii* (a new species) and *Panopeus limosus*, a new combination for *Cancer limosa* Say (1818, *Acad. nat. Sci. Philadelphia*, vol. 1: 446). Two other species were doubtfully assigned by H. Milne Edwards to his new genus: *Cancer trispinosus* Herbst, 1803, and *Cancer ochtodes* Herbst, 1783.

3. In the synonymy of his new *Panopeus herbstii*, H. Milne Edwards cited *Cancer panope* Herbst (1801, *Versuch Naturgeschichte Krabben Krebse*, vol. 3(2): 40, pl. 54, fig. 5) and Say's (1817, *J. Acad. nat. Sci. Philadelphia*, vol. 1(1): 58, pl. 4, fig. 3) use of Herbst's name *Cancer panope* for an East American species. H. Milne Edwards did not indicate a type species for his genus *Panopeus*, neither did he indicate a holotype for *Panopeus herbstii*.

4. The material used by H. Milne Edwards for his description of *Panopeus herbstii* originated from "les côtes de l'Amérique septentrionale" and formed part of the collection of the Paris Museum. It belongs to the East American species of mud crab that at present still is indicated with the name *Panopeus herbstii*. The material that Say (1817: 58) reported upon as *Cancer panope* consists partly of *Panopeus herbstii* and partly of *Neopanope texana sayi* (Smith, 1869) (see Rathbun, 1930, *Bull. U.S. nat. Mus.*, vol. 152: 335, 369); Say's figure (pl. 4, fig. 3) shows *Panopeus herbstii*.

5. *Cancer panope* Herbst, 1801, is an Indo-West Pacific species, the type locality of which is Tranquebar, India. Balss (1932, *Zool. Anz.*, vol. 142(4): 513) showed that the species belongs in the genus *Sphaerozius* Stimpson, 1858. The generic name *Sphaerozius* Stimpson has been placed on the Official List of Generic Names in Zoology, as Name No. 372, in Opinion 85 (1925, *Smithson. miscell. Coll.*, vol. 73(3): 13, 17).

6. *Panopeus herbstii* H. Milne Edwards, 1834, thus is a composite species, being based (a) on material of the common East American mud crab that at present is best known as *Panopeus herbstii*, and on Say's (1817) figure and description of the same species, (b) on material of *Neopanope texana sayi* (Smith, 1869) with which Say's material of *Panopeus herbstii* was mixed, and (c) on the material of *Sphaerozius panope* (Herbst, 1801), which formed the type material of *Cancer panope* Herbst. So far as I know, no lectotype has ever been selected for *Panopeus herbstii* H. Milne Edwards, but all authors assigned the name to the common East American mud crab. To legalize this current practice, I now select as lectotype for *Panopeus herbstii* the specimen figured by Say (1817, *J. Acad. nat. Sci. Philadelphia*, vol. 1(1): pl. 4, fig. 3) under the name *Cancer panope*.

7. Now that the identity of the name *Panopeus herbstii* is fixed, that of the genus *Panopeus* should be discussed. The first type selection for the genus *Panopeus* that I know of is by E. Desmarest (1852, in Chenu, *Encyclopédie d'Histoire Naturelle* (Crustacés—Mollusques—Zoophytes): 17), who stated: "*Panopeus*: genre américain, ayant pour type le *Cancer panope*, Herbst, que M. Milne Edwards nomme Panopé d'Herbst". The type species of *Panopeus* H. Milne Edwards, 1834, thus is *Cancer panope* Herbst, 1801, as H. Milne Edwards, in the original description of *Panopeus herbstii* cited that species by name in the synonymy of his new species. Desmarest's type selection makes *Panopeus* H. Milne Edwards, 1834, a senior subjective synonym of *Sphaerozius* Stimpson, 1858, and thus would have to replace the latter, while the valid name for the genus of East American mud crabs known at present as *Panopeus* should become *Eupanopeus* Rathbun (1898, *Bull. Lab. nat. Hist. State Univ. Iowa*, vol. 4: 273) (type species by original designation: *Panopeus herbstii* H. Milne Edwards, 1834).

8. The name *Panopeus* has never been used for a species of *Sphaerozius* or any of the related genera. Although the name *Sphaerozius* probably is not well known by non-taxonomists, it figures in many handbooks and more restricted publications, especially as the genus has a wide range within the Indo-West Pacific region (Red Sea and S.E. Africa to Japan and Polynesia). To replace *Sphaerozius* Stimpson would be most inconvenient, the more so as it has already been placed on the Official List of Generic Names in Zoology.

9. On the other hand, the generic name *Panopeus* has become fully accepted for the common American mud crabs, not only in taxonomic literature but also in popular handbooks, in publications dealing with ecology, behaviour, etc. The range of the genus is not restricted to the East American coast (Bermuda and Massachusetts

to southern Brazil), but it is also found on the East Atlantic coast (S. Portugal to Angola), and on the West American coast (Mexico to Chile). The name *Eupanopeus* proposed by Rathbun in 1898 has never been fully accepted and was abandoned by Rathbun herself in 1910; since that time *Panopeus* has been consistently used for the genus. Several related genera have names derived from *Panopeus*, viz. *Eurypanopeus*, *Lophopanopeus*, *Hexapanopeus*, etc. To remove the name *Panopeus* from this group of genera to a quite different section of the family XANTHIDAE would cause a very serious confusion.

10. E. Desmarest (1852) when selecting the type species for *Panopeus*, clearly thought *Cancer panope* Herbst to be identical with *Panopeus herbstii* H. Milne Edwards, as he referred to the genus as a "genre américain". Desmarest's type selection thus is the result of a misidentification of the type species.

11. In order to make it possible to use the generic names discussed here in their accustomed sense, the International Commission on Zoological Nomenclature is now requested:

- (1) to use its plenary powers
 - (a) to set aside all type designations for the genus *Panopeus* H. Milne Edwards, 1834, made before the publication of this ruling, and having done so,
 - (b) to designate *Panopeus herbstii* H. Milne Edwards, 1834, to be the type species of that genus;
- (2) to place on the Official List of Generic Names in Zoology the name *Panopeus* H. Milne Edwards, 1834 (gender: masculine), type species designated under the plenary powers in (1)(b) above, *Panopeus herbstii* H. Milne Edwards, 1834;
- (3) to place on the Official List of Specific Names in Zoology the name *herbstii* H. Milne Edwards, 1834, as published in the combination *Panopeus herbstii*, as defined by the lectotype designation in paragraph 6 above (specific name of type species of *Panopeus* H. Milne Edwards, 1834).